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## Executive Summary

Since 1998, the executive branch has implemented wide-ranging administrative reforms to construction procurement and management in the Commonwealth. However, there are limits to reform without legislative changes, particularly in the area of alternative construction methods. In the administration's comprehensive review of construction procurement and management practices, the importance of being able to take a flexible approach to construction procurement and delivery emerged repeatedly.<sup>1</sup> The federal government has been using alternative construction methods for as long as a decade, other states have passed legislation authorizing these methods, and research has proven their effectiveness in cost and time savings.

- ◆ Construction reform is important because the Commonwealth spends over \$3 billion annually on public construction, and the demand for capital investment far exceeds this amount. Alternative construction methods provide one way to stretch these capital dollars farther.
- ◆ An independent study found that Massachusetts could save at least \$220 million a year by using alternative construction methods. *To put this amount in perspective, the Division of Capital Asset Management and Maintenance spends approximately \$200 million annually on capital projects, and the Department of Education's School Building Assistance Program spends approximately \$275 million annually in school construction and/or renovation.*
- ◆ The Commonwealth of Massachusetts is one of only five states that does not have the ability to use design/build, one of the most

well-known alternative construction methods, without special legislation.

Without construction reform, the Commonwealth misses opportunities to improve its performance as one of the largest asset and land owner/managers in Massachusetts by not taking advantage of updates in best practices and technology.

- ◆ Roads and bridges that could be built or repaired more quickly and less expensively mean less time waiting in congested traffic and more money for other projects.
- ◆ Courthouses and prisons that can be constructed using design and construction techniques that fit the process to the project make it possible for the Commonwealth to save time and money and improve quality.
- ◆ Modernizing procedures and techniques makes it easier for state staff to be aggressive contract managers, and at the same time, makes it possible for the Commonwealth to improve the quality of its relationships with its partners and vendors.

Most public construction laws have not been changed for nearly 20 years, since the Ward Commission issued its recommendations to curb corruption in building design. Yet there is no evidence in other states that the use of alternative construction methods leads to corruption.<sup>3</sup>

This policy brief focuses on the justification for using alternative construction methods and provides an update on selected elements of the administration's Construction Reform initiative.

*Rosemarie Day and Rosemarie Bonaventura at the Executive Office for Administration and Finance prepared this policy brief.*

<sup>2</sup> Survey conducted by Design Build Institute of America, 1996

<sup>3</sup> Conversation with Douglas Gransberg, September, 1999.



*"Massachusetts has the dubious distinction of having the most regulated public construction contracting process in the country. Massachusetts statutes override the normal rules of law governing private contracting in the area of public bidding and in many important aspects of the performance of public contracts, as well as the fiscal aspects of contracts with state instrumentalities and municipalities."*<sup>4</sup>

### Construction Reform Legislation (H. 4288)

On April 27, 1999, Governor Cellucci and Lt. Governor Swift filed legislation that would significantly improve the Commonwealth's public construction operations. This legislation embodies the recommendations of the Construction Reform Advisory Board made up of state, industry professionals, professional trade organizations, and representation from the cities and towns. The reforms proposed in this bill would update existing laws and give state agencies, public authorities, and municipalities the tools to bring the Commonwealth into the new millennium, without sacrificing the important safeguards that keep public construction honest, open, and competitive. These reforms would result in substantial cost and time savings, and improve the quality of public infrastructure in the Commonwealth.

#### Alternative Delivery Methods

One of the biggest reform measures included in this legislation will permit the Commonwealth's large public construction agencies<sup>5</sup> to use proven alternative delivery methods of construction such as design/build, turnkey, construction manager at risk, and build/operate/transfer, when appropriate. Traditional construction follows a design-bid-build process which keeps the designer's work separate from the constructor's work; alternative methods collapse these steps to save time and money, improve quality, or change incentives for long-term maintenance.

In selecting the appropriate delivery method for a project, the following variables must be considered: project drivers and the experience of the organization procuring the construction. Project drivers are the most important aspects for decision-makers to consider in a project, typically time, money, and quality.

Construction Method	Definition	Project Driver
Design-Bid-Build	Each step of design, construction must be completed before beginning the next step. Easy to manage, but time consuming. Does not allow for contractor input early in project.	Money
Design/Build*	Allows construction to begin before the final design is complete. Expedites delivery by allowing design and construction to overlap and increases designer/contractor relationship.	Time
Multiple General Contractors	Project is designed to completion in distinct stages, bid and built separately using different general contractors. Expedites delivery by allowing initial phases of project to begin, while subsequent phases are being designed.	Time Money
Construction Manager	One contractor entity gives the owner advice early in the project and helps coordinate the management and oversight of the project. The owner only has to deal with one contractually responsible entity throughout the project.	Quality Time

<sup>4</sup> James J. Meyer, Christopher L. Noble, and Penny P. Cobey, Construction Law, 1997.

<sup>5</sup> The Division of Capital Asset Management and Maintenance (DCAMM), Massachusetts Highway Department (MHD), Massachusetts Turnpike Authority, Massport, Massachusetts Water Resources Authority (MWRA), the Massachusetts State College Building Authority (MSCBA), the University of Massachusetts Building Authority, Massachusetts Development and Finance Agency, and Massachusetts Bay Transportation Authority (MBTA).



Construction Method (cont.)	Definition	Project Driver
Construction Manager-at-Risk*	Same as Construction Manager with additional managerial and financial responsibility.	Time Quality
Build-Operate-Transfer*	One entity is in charge of design, construction, long-term financing, and temporary operation of the project. The operation of the project is transferred to owner at the end of a defined operation period.	Time Money Quality Maintenance
Turnkey*	One entity performs the design, construction, and short-term financing of the project. Payment is made at the completion of the project.	Time Money

\*Requires special legislation. Included in the Construction Reform legislation (H.4288).

### Alternative Procurement Methods

To address the shortcomings of the current low bid procurement process, the Construction Reform legislation authorizes alternative procurement methods, such as “best value” procurement and A+B bidding (which are applicable to the construction methods listed in previous chart), for the Commonwealth’s large construction agencies.

“Best value” procurement is currently in use by the federal government for all procurements (goods, services, and construction) and in the Commonwealth for the purchase of goods and services, but not in construction. Best value procurement allows agencies to consider factors in addition to price when making a selection. For example, an agency could give weight to the experience of the contractor when specialized expertise is required for a project (such as with historic preservation work). The goal is to get the best quality available for a reasonable cost.

Another proven procurement method that the Construction Reform legislation would authorize is A+B bidding, currently used by several states’ highway departments. A+B bidding allows the procuring agency to weight price (A) and time (B) as factors in making the selection. Time is given a dollar value, based on an analysis of the inconvenience to the motoring public.

#### *Why use alternative methods?*

##### *1. Time is money...*

The Commonwealth’s sequential construction process takes longer than other acceptable delivery methods and is ultimately more expensive for taxpayers. For example, bridge rehabilitation has farther reaching cost implications than the job’s price tag. Disruption to businesses on both sides of the bridge results in lost revenue for those businesses and forfeited tax revenue for the state. Indirect costs mount over time in inconvenience to citizens and project overhead.

Fast-track delivery methods, such as design/build, can take care of this problem. Design/build has been authorized for specific projects, such as the Reggie Lewis Track at Roxbury Community College, which saved at least 6 months in construction. The facility was made available to students sooner than under the traditional construction method.



## 2. Bridging the gap...

During any given project, the Commonwealth hires multiple designers, contractors and subcontractors at different stages of the process. These companies may have very different ways of approaching a job and disagreements can arise. These disputes cause delays and inevitably cost the Commonwealth money. By employing a method, such as design/build, which allows designers and contractors to work together earlier in the project, some of these disputes could be resolved before the first shovel hits the ground.

## 3. When given the chance...

The Commonwealth has demonstrated that when it breaks free from its traditional construction procurement process, it can do more in less time and for less money. A special provision in the General Laws has allowed DCAMM to use a "two step" quality and price-based procurement process for modular construction. This method was used to procure the contractor for the recently completed MCI Shirley project, which was completed on budget and in record time.

## 4. The Commonwealth shouldn't be penny-wise and pound-foolish...

Low bid selection doesn't always bring the best value when projects are complex, such as historic preservation. And, long-range operating costs should be considered when making design and construction decisions. Special legislation is allowing for the accurate restoration of historic buildings such as the McKim building in the Boston Public Library and the preservation of the exterior of the State House.

## 5. The Commonwealth needs to target its efforts to get the best quality for available resources...

Most of the time, it is possible to save money during design, so it is important to get constructability advice before the design process is complete. Also, there is little room for innovation in the project methods when the procurement process does not allow designers and general contractors to collaborate.

### *Other States*

Research findings have proven that other states employing alternative construction methods have experienced significantly reduced construction costs and delays compared to Massachusetts.

The tables below summarize the results from a study recently conducted by Pioneer Institute, "The Cost of Inaction: Does Massachusetts Need Public Construction Reform?" The author of this study, Douglas Gransberg, compares the performance of the Massachusetts building and road construction projects to the performance of building and road projects in Indiana, Florida and Texas with respect to project cost and schedule. Of these four states, Massachusetts fares the poorest in every category. *The study concludes that Massachusetts misses the opportunity to save over \$200 million of its \$3 billion in annual spending on construction.* The Commonwealth could use these savings to complete more capital projects with its current resources.

	Massachusetts	Indiana	Texas	Florida
Average Cost Growth <sup>6</sup>	11.27%	1.41%	3.68%	9.99%
Average Time Growth <sup>7</sup>	55.2%	6.0%	11.6%	16.90%
Cost per Square Foot <sup>8</sup>	\$202.00	\$142.00	\$127.00	\$128.00

<sup>6</sup> Cost growth measures the increase of a construction contract amount from its award price to the total final price.

<sup>7</sup> Time growth measures the increase or decrease in a contract's life, the difference between the scheduled date of the contract's completion and the final date of the contract's completion from the date that the feasibility study of the project was awarded.

<sup>8</sup> Cost per square foot figures are normalized.



Pioneer Institute has recently released further data that compares cost and time growth exclusively for building projects in Massachusetts, Florida and Texas. Unlike road construction in Massachusetts, building construction requires every project to complete a two-step study/design process<sup>9</sup> and to file sub-bids.<sup>10</sup>

	Massachusetts Design-Bid-Build	Texas Design-Bid-Build	Florida CM At Risk <sup>11</sup>
Average Cost Growth	24.08%	2.53%	-1.08%
Average Time Growth	43.26%	2.58%	-2.85%
Cost per Square Foot <sup>12</sup>	\$202.00	\$114.18	\$91.05

Texas, like Massachusetts, relies on the design-bid-build delivery process for its building construction projects; but it has no filed sub-bid requirement. Massachusetts' ten-fold cost growth and seventeen-fold time growth over Texas, indicate the debilitating impact of the filed sub-bid statute on project performance. As cost and time growth are relative measures from contract signing to project completion, the different performance outcomes cannot be attributed to wage levels, benefits, or even differences in environmental laws. The outcome is in line with research suggesting that the filed sub-bid law creates an adversarial contractual atmosphere, causing delays which undermine the ability to deal with disputes in a cost- and time-effective manner.

Florida differs from Massachusetts in that it is both free from the filed sub-bid constraint and free to employ alternative construction methods. As a result, Florida's relative cost and time measures are both negative, meaning that projects came in under budget and ahead of schedule.

#### *Additional research findings*

- ◆ A study conducted in 1998 concludes that, "*projects administered using design/build project delivery can achieve significantly improved cost and schedule advantages.*"<sup>13</sup> This study compares cost, schedule, and quality performance of 351 public and private U.S construction projects using alternative methods to projects using design-bid-build, and the performance of 332 U.K. projects using alternative methods (see chart below). *The results show that the United States can essentially complete a three-year project in two years using design-build.*

	Design/Build vs. Design-Bid-Build in U.S.	Design/Build vs. Design-Bid-Build in UK	CM-at-Risk vs. Design-Bid-Build in U.S.
Unit Cost	6% Less	13% Less	1.5% Less
Delivery Speed	33% Faster	30% Faster	13% Faster

<sup>9</sup> Current public construction law requires the procurement of two different designers for each public construction project. One designer is selected to complete the feasibility study, and another designer is selected to complete the final design.

<sup>10</sup> Currently, state agencies and municipalities are required to file sub-bids for projects over \$25,000. This means that the designer must divide every building contract above this threshold into the 17 sub-trades classified by law, and publicly advertised each piece before the general contractor is selected.

<sup>11</sup> The data is from Lee County's experience with Construction Manager-At-Risk.

<sup>12</sup> Cost per square foot figures are normalized.

<sup>13</sup> Konchar, Mark and Victor Sanvido. "The Comparison of U.S. Project Delivery Methods." Journal of Construction Engineering and Management. November/December 1998.



- ◆ Another recent study<sup>14</sup> comparing project data from several states noted that the selection of a lowest bidder has several shortcomings, in that this method does not always offer the best value for the taxpayer's dollars. Lowest bid, for example, increases the likelihood of change orders. More importantly, this method does not consider the time sensitivity of a project, or the contractor's qualifications, allowing poor contractors to be repeatedly awarded projects. The study further examines effective alternatives to the procurement process in Massachusetts, such as a qualifications-based selection, a price and time-based selection (A+ B bidding), or a selection based on a contractor's past performance or track records. *The paper concludes that overall the transportation departments in Indiana and Florida save money and time by using A + B bidding.* This is contrasted with the Massachusetts Highway Department<sup>15</sup>, which experiences an average cost growth of 4.5%, and average time growth of 68% (see chart below). MassHighway could be more successful in containing cost, and delivering critical projects on time, if it were allowed to use the A + B procurement method which accounts for the price of time (e.g. traffic, lane closure, revenue loss).

	MassHighway Design-Bid-Build	Indiana A + B Bidding	Florida A + B Bidding
Average Cost Growth	4.5%	-21.4%	N/A
Average Time Growth	68%	-33.4%	-16.4%

### Federal Government

In 1999, the federal government through the General Services Administration (GSA) spent \$29 million on the construction and renovation of federal government buildings in New England. The rules for construction procurement and delivery methods are governed by the Federal Acquisition Regulations (FAR). These rules were revised several years ago to allow more flexible procurement and delivery methods, selected on a project by project basis, that offer the "best value" to taxpayers (the best quality at a reasonable cost). The General Services Administration introduced design/build in the early 1990s. Today, many federal government agencies<sup>16</sup> are using design/build. Although skeptical at first, project managers in these federal agencies have admitted that there are fewer hassles, lower cost, greater speed, and better quality in design/build projects compared to using design-bid-build.<sup>17</sup>

### Alternative Construction Methods in Massachusetts

Currently, Massachusetts state agencies can use alternative construction methods such as design/build only through special legislation. Recent approvals of such legislation include the Route 3 North legislation (design/build/operate/transfer) and the courthouse bond bill (design/build). Unfortunately, legislative approval may offset any time savings associated with a project, given the vast number of filed bills that await legislative approval. There have been several successful alternative construction projects in Massachusetts, including the Suffolk County Jail, the Reggie Lewis Track, the Maximum Security Correctional Institute in Shirley, and the Massachusetts Information Technology Center in Chelsea, which have saved the

<sup>14</sup>Runde, Dan and Yutaka Sunayama. "Innovative Contractor Selection Methods: Alternatives to the Traditional Low Bid in Massachusetts Public Construction", John F. Kennedy School of Government, April 6, 1999.

<sup>15</sup> Massachusetts Highway Department is not subject to the two-step study design and is not required to file sub-bids, which can add to cost growth.

<sup>16</sup> Including the State Department, the U.S. Department of Veteran's Affairs, Federal Bureau of Prisons, the Army Corps of Engineers, the U.S. Navy, the U.S. Air Force, the Environmental Protection Agency, the Federal Highway Administration, and the U.S. Postal Service

<sup>17</sup>Silver S., Elaine. "Shaken Sensibilities Force Creativity," Design-Build, June 1999.



Commonwealth 6 months to 1 year in construction time. Time savings are important, because there are significant costs and revenue losses from delays in construction or renovations.

### *Financial impact of construction delays*

Time is money. Annual construction costs escalate by approximately 2-5% each year<sup>18</sup>. The Massachusetts legislature recognized the economic benefits of an expedited construction process in enacting the convention center legislation (Chapter 152, Acts of 1997). This legislation authorized the Convention Center Authority to use an alternative construction method: construction manager-at-risk.

**Convention Center:** In full operation, the Boston Convention Center has the potential to generate \$764.6 million/year in direct and indirect spending by convention delegates, exhibitors, and visitors. The Convention Center is also expected to create over 10,000 jobs in the Commonwealth. By using the construction manager-at-risk method, the state is likely to benefit from these enormous economic impacts sooner than if the project were constructed under the traditional method.

The following are some examples of projects that are more typical in scale where the state would save money by using expedited construction processes:

**Dorm Opening:** In a typical new 300 bed residential hall at a state college financed by the Massachusetts State College Building Authority, \$1.2 million in gross revenue per year would be lost from a delay in the opening of a new college dorm in the public system. In addition, 300 admitted students would be unable to live in campus housing for that year. The college also faces the financial risk to pay the \$1 million owed in debt service for the dorm's construction, which would have been paid through the dorm's rent revenue.

**Saltonstall State Office Building:** The state will incur \$15 million/year in lease space expenses while the Leverett Saltonstall Building remains closed. If legislation were enacted to allow alternative construction procurement and delivery methods to renovate the building, the state would save money with an expedited construction process.

### **Additional reforms proposed in H. 4288**

#### *Collapse of two-step design process*

Current public construction law requires the procurement of two different designers for each public construction project. One designer is selected to complete the feasibility study, and another designer is selected to complete the final design. This current system is inefficient because it adds as much as a year to the length of a single project, and decreases the policy/decision-making continuity on the design of the project, and the accountability of the architect on record. The construction reform legislation proposes to collapse the current two-step design process into one single designer with required independent value-engineering consultation at the conceptual design stage for all projects, and again at the schematic design stage for projects valued at more than \$10 million.

<sup>18</sup> Engineering News-Record. December, 1999. ([www.enr.com/cost](http://www.enr.com/cost))



### ***Update current dollar thresholds to reflect current business conditions***

The thresholds for public construction bidding have not been changed for almost two decades. Currently, state agencies and municipalities are required to file sub-bids for projects over \$25,000. This means that the designer must divide every building contract above this threshold into the 17 sub-trades classified by law, and publicly advertise each piece before the general contractor is selected. Two weeks later, the general contractor that submits the lowest cost for the project is selected. In order to submit the lowest bid, general contractors have little choice but to assemble their bid by using the low-bid subcontractor from each trade without regard to the subcontractors' reliability, or quality of work. In addition, current law limits the general contractor's ability to enforce the time schedule and resolve conflicts between sub-bidders. The general contractor's lack of control and coordination over the sub-bidders contributes to adversarial relationships, creating project delays.

The construction reform legislation proposes to increase the public building construction threshold subject to Chapter 149 to \$250,000, in accordance with increased costs of construction. Increasing this threshold will allow state agencies and municipalities to complete small projects (under \$250,000) without filing bids for subcontractors. Subcontractors, however, would not be eliminated from the construction process. General contractors will still need to hire the specified trade expertise of subcontractors to complete any building project. The change would therefore, allow general contractors to form their own teams, increasing accountability and minimizing delays.

Small businesses would also benefit from this change, since state certification and bond capacity would not be required for projects under \$250,000, allowing small businesses to compete more freely and more frequently.

### ***Contractor evaluations***

The Division of Capital Asset Management and Maintenance relies on contractor evaluations in determining the certification of contractors, yet very few are filled out upon project completion. As a result, only a small percentage of poor contractors are de-certified each year by DCAMM. Of all applications for certification, less than 5% are rejected each year. Thus, poorly qualified contractors continue to bid on public construction projects. To ensure that qualified contractors bid on public work and poor contractors are screened out, contractor evaluations must be completed. To encourage the completion of more contractor evaluations, the proposed legislation would indemnify architects, engineers or public employees that fill out honest evaluation from personal financial loss and expenses.

### ***Administrative Reforms***

In addition to identifying needed changes to the existing laws, the Construction Reform Task Force has reviewed and taken measures to change the existing administrative practices across state agencies, in order to improve the efficiency and customer service of the public construction process.



## Technology

- A Construction web site has been created ([www.state.ma.us/construction](http://www.state.ma.us/construction)), which runs in conjunction with Comm-PASS, the state on-line procurement and solicitation system. Since it was established in November 1998, the site has received over 17,000 hits. The site has incorporated "how to" manuals from the large construction agencies for contractors doing business for the first time, outlining bidding, payment process, change order procedures, information on minority and women-owned businesses, etc. In addition, the site provides a library reference of construction-related laws, and regulations, as well as relevant forms (i.e. evaluation forms, prequalification applications, etc.) Direct links to construction and procurement agencies' home pages are also included.
- As of January 1999, designers must submit all design blueprints for DCAMM projects on compact discs. Designers and contractors must also submit detailed critical path schedules to DCAMM in electronic format, saving time and paper.
- In October 1999, the Department of Housing and Community Development began piloting a project specific web site for construction. This new technology facilitates communication among team members, reduces the cost of expensive administrative procedures (i.e. faxes, overnight deliveries, etc), and ultimately saves time on design and construction.
- Next steps include creating centralized web-based applications that tie in with the central business registry and departmental databases so that the awarding authorities can share contractor information online.

## Training

- The Inspector General's Office has teamed up with the construction staff from state agencies to launch a professional development curriculum for public sector construction staff. The first course began in January, 2000. This four day introductory course serves as one of two prerequisites for a series of six courses that will result in the designation of "Certified Design and Construction Professional."

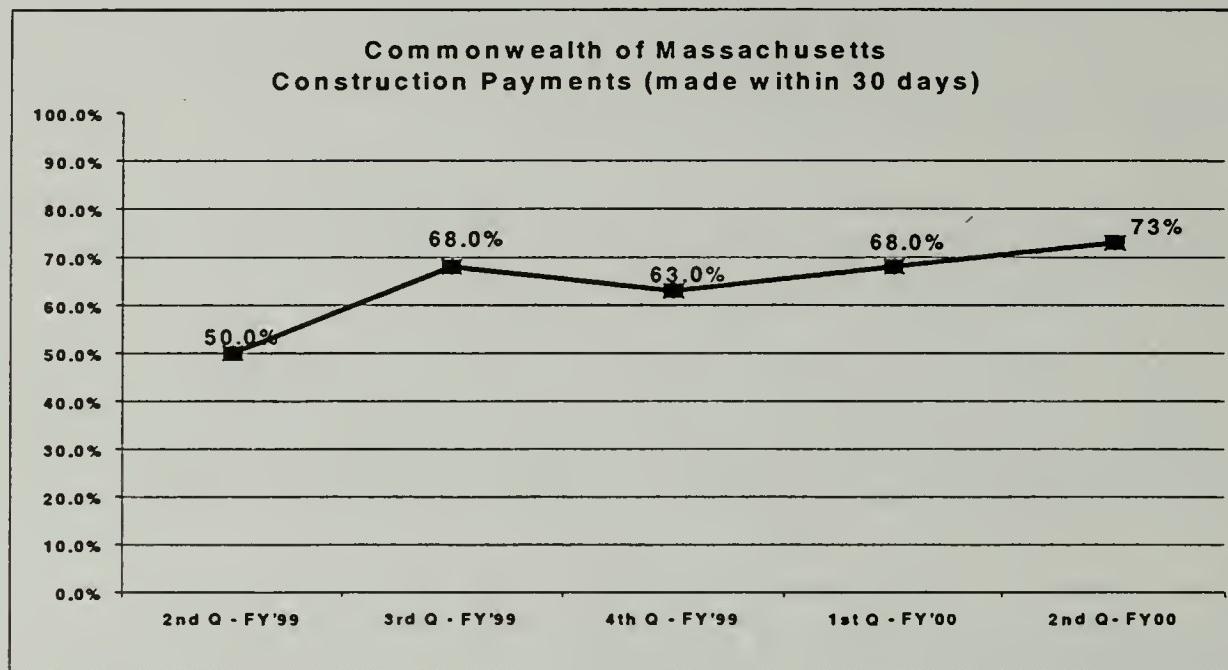
<b>MASSACHUSETTS CERTIFIED DESIGN AND CONSTRUCTION PROFESSIONAL Proposed Course Curriculum:</b>	
<b>Course Requirement</b>	<b>Course Number</b>
• Construction Management	CM 100
• Design Management for Building/Public Works projects	CM 200/201
• Field Construction Operations for Building/Public Works projects	CM 300/301
• Facility Management for Building/Public Works projects	CM 400/401
• Facility Repair for Building/Public Works projects	CM 500/501
• Computer Technology	CM 600

- DCAMM hosted its first-ever training seminar for cities and towns on the benefits of construction management in January, 2000. The seminar included presentations from construction managers and local officials. The seminar may be repeated in this summer as one of the Massachusetts Municipal Association's course offerings.
- A partnering awareness training was held in March 1999 for over 70 employees from six agencies and the Associated General Contractors. Another training session on negotiation and facilitation will be held by Fall, 2000 for state agency construction project managers.



### Payment Process

Prior to the Construction Reform Task Force's review, the Commonwealth paid less than half of its construction bills on time. After a year of focused efforts in eight state agencies, the state is paying over 70% of its construction payments on time. This progress is a result of agencies institutionalizing reforms, such as eliminating several layers of review, simplifying procedures between field and central offices, and resolving issues with contractors before a bill is submitted. Improvements are continuing to be made.



### Partnering

The Commonwealth has recently adopted partnering in several of its agencies, changing the way it does construction business. Partnering is a way of conducting business in which two or more organizations make long-term commitments to achieve mutual goals.<sup>19</sup> Other states, such as Texas, have experienced less cost and time growth from partnered construction projects. Partnering is an alternative construction method that does not require special legislation.

The Massachusetts Highway Department is partnering 33 new projects, in addition to the 40 partnered projects already underway. MassHighway now has a partnering coordinator in each of their five district offices, and is also developing a toolkit (standard forms, etc.) to supplement their partnering handbook. Other agencies have also adopted partnering. The Division of Capital Asset Management and Maintenance began partnering its first formal job, the UMASS Lowell Student Center this winter. The Department of Housing and Community Development issues a letter promoting partnering among the state, local housing authority, and the general contractor for each project.

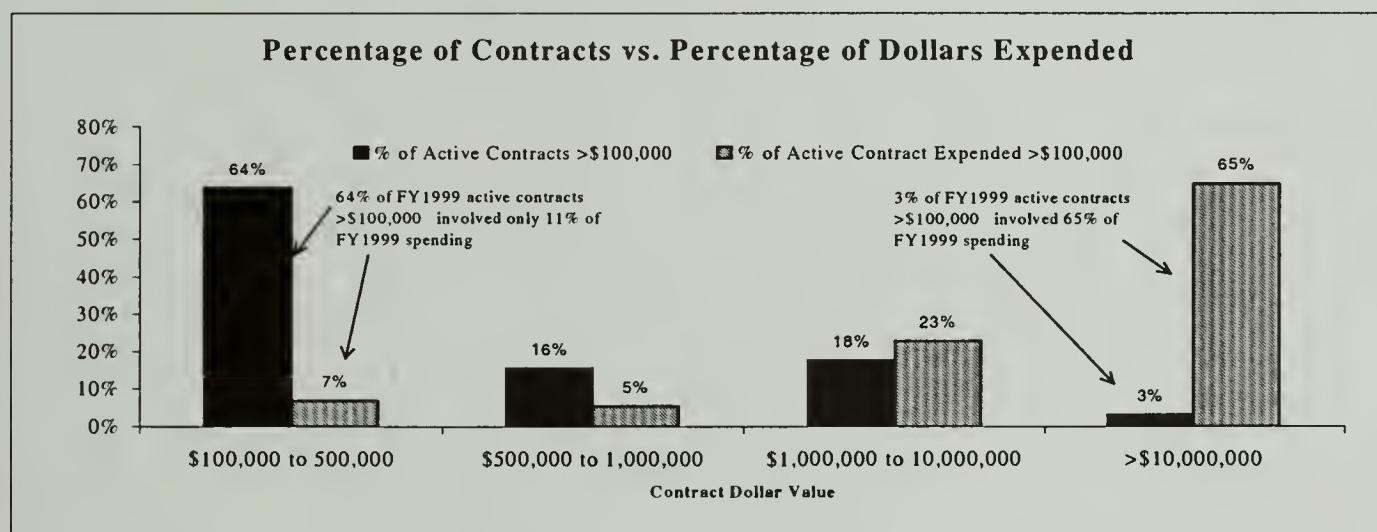
<sup>19</sup> [Commonwealth of Massachusetts Partnering Manual](#)



## Construction Contracts

The Commonwealth Construction Committee is in the process of finalizing standard building and road construction contract boilerplates for small and large construction projects that will be issued to all state agencies doing construction work. In January 2000, the Division of Capital Asset Management and Maintenance began using the newly revised building construction contract for projects under Chapter 149, which will be issued statewide in the Spring, 2000. A new standard contract has also been developed (currently under review) for smaller building construction projects under Chapter 30, Section 39M. MassHighway has revised and standardized its road construction contract, which will also be issued in the Spring, 2000.

Each contract has been simplified and streamlined by incorporating certain items by reference to statute, regulations or guidelines where feasible or to the extent that it results in a more user-friendly document. Certain provisions that are common in all construction contracts have been standardized, including alternative dispute resolution language, and the option to use electronic funds transfer. Each building contract boilerplate will include standardized tabs used in the horizontal contract, achieving uniform organization and facilitating contract review and identification of key elements. Finally, training on the use of the new contracts will be provided to agency staff when the contracts are finalized and issued for statewide use. This standardization should reduce the overhead costs of contract administration. Since 64% of state construction contracts are relatively small (\$100,000 to \$500,000), accounting for only 7% of the total construction contract dollars, the benefits of standardizing such contracts should be substantial.



## Design Forms

The Designer Application Form has been revised, consistent with federal forms, making it simpler for firms to do business with the state.

## Conclusion

The administration of public sector construction contracts is based on laws that originated over 50 years ago. It is time that the Commonwealth incorporate advances in the construction industry's practices and technology into state process. Such advances are common practice in other states and at the federal level. The executive branch has begun to change its processes. However, these changes will be greatly enhanced by the enactment of the Construction Reform legislation.

